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Aviation COR Mentorship Program

An undergraduate thesis project

By

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For

The Lee Honor's College

Submitted in partial fulfillment of the
Requirements for a degree with Honors of
Bachelor of Science

Western Michigan University

College of Aviation

2023

What is the Aviation COR Mentorship Program (COR)?

Program Mission Statement

The Western Michigan University (WMU) Aviation Mentorship Program has been established to aid students in becoming successful students and professionals. This program is based on 3 core values: Coaching, Opportunity, Resilience (COR). After having gone through this program students will have improved major specific knowledge, general information of aviation opportunities, and the skills to succeed throughout college.

Definition of the Core Values:

- Coaching: Coaching has to do with the mentee transition smoothly into a college life and developing skills to succeed. Important skills are time management, studying, and managing the responsibilities of living away from home.
- Opportunity: Opportunity is about exposing the mentee to the various careers in aviation. It also incorporates developing the mentees knowledge of resources at WMU to have them successfully reach their goals.
- Resiliency: Resilience is the ability of one to resist stress based on how one's past stress events and other factors. This program will equip mentees with the knowledge and skills to improve their resilience, which in turn will have a positive effect on their success.

Program Structure

The program is ideally constructed where one mentor would have a group of 3-5 mentees. This can be scaled any way to fit the number of mentors and mentees. They would communicate via a group chat or individual messages. All the mentors will be in a Microsoft Team with the program advisor. This is so the advisor can send updates, assign mentees, communicate, and support the mentors through the duration of the program.

Mentor/Mentee Criteria

Mentee Criteria: First- or Second-year student in WMU's College of Aviation with a desire to learn about the aviation industry and self-growth.

Mentor Criteria: Third year or greater student in WMU's College of Aviation. Mentors should also have a desire for servant leadership and a desire to help other students succeed.

Program Meetings and Events

The mentor will coordinate a time to meet with each mentee once a month during the semester. This can be a group meeting or any combination of mentees as long as each mentee has a meeting. There will be three required events for the mentees to attend, as this will aid in

achieving the goals set for the program. The three events will be related to each of the core principles, having one event for each. A list of eligible events are as follows:

Coaching Eligible Events: Attend a study group or study help, a professors’ office hours, resume help in Ellsworth, writing help in Ellsworth, or any other “Coaching” related event *approved by the advisor.

Opportunity Eligible Events: Attend a job fair, Aviation Outlook Day, an industry related presentation, or any other “Opportunity” related event *approved by the advisor.

Resiliency Eligible Events: Attend a WMU hosted mental health event or a meeting between mentor/mentee covering all mental health resources on campus. Other eligible events are a meeting between mentor/mentee on what resiliency is and how to practice it, tips to improve resiliency (found in power point), or any other “Resiliency” related event *approved by the advisor.

*Approved by advisor means any events the advisor provides as an eligible event or after be mentor asking if an event would count

Schedule of Events

Mentee Meetings	1 per month for the duration of the school year (7 total)
Coaching Event/Meeting topic	1 per Semester
Opportunity Event/Meeting topic	1 per Semester
Resilience Event/Meeting topic	1 per Semester

Guidelines for Mentors

1. Maintain an appropriate relationship with mentee(s).
2. Check Microsoft Teams every couple of days for updates and information.
3. Make themselves familiar with resources in Microsoft Teams.
4. Understand what counts for an eligible event.
5. Understand the goals of the program.
6. Communicate with program advisor with any questions about the program.

Goals of the Program

Goal	How to Achieve it	How to Measure it
Coaching: Assist new college students with adjusting to college	Through meetings and talking with fellow mentees and the mentor	Pre/post survey or recorded meeting

Opportunity: Increase new students' knowledge about career paths	Supply them resources about the various kinds of aviation jobs	Pre/post survey or recorded meeting
Opportunity: Increase new students' knowledge about what WMU offer to help their career	Supply them resources of partnership programs and reminders of career focused events	Pre/post survey or attendance increase to job fairs
Resiliency: Give new students tools to deal with stress and build resilience	Attend meetings or events to learn what resilience is and how it helps deal with stress and increase pass rates	Pre/post survey or pass rates or recorded meeting or activity or survey
Resiliency: Ensure students know about mental health resources on campus and what is or is not reportable	Supply resources or directions to mental health resources and which kind of activities are normal	Attendance at mental health summit/recorded meeting and survey
Attendance/Participation: 30% of total identified mentee population 30% of total identified mentor group	Advertising, email form	See how many signed up and participated compared to active students

Evolution and Data Collection

This initial test of this program ran for the duration of the Spring 2023 semester. The mentorship program was originally set up for Flight Science Aviation students. Participants for mentors and mentees were gathered via survey. The turnout was not what I expected, nor was it enough to gather sufficient feedback. I then opened the mentorship program to all in the College of Aviation and sent out another survey to Flight Science, Tech Ops, and Management majors. After this second round of surveys the final number of mentors was 31 and mentees was 14.

After both surveys were sent and filled out, I worked on pairing mentors with mentees and posted those pairings in the Microsoft Teams. It is important to note that due to the ratio of mentors to mentees some mentees had two mentors. This was so that I could get as much feedback as possible from those in the program. An ideal mentor to mentee ratio would be between 1:3-1:5 (more details on this later). I set up a table at the College of Aviation (COA) Aviation Education Center (AEC) as a meet and greet for the mentors to explain their position and show them how to access Microsoft Teams and its resources. This event was not as successful as I had hoped, only having around 10 mentors attend. The program continues throughout one semester.

At the end of March, I sent out the post program surveys to the mentors and the mentees to gather the data that would be used cultivate the program for future years. I queried the mentors on mentee participation, issues they faced, workload, results from their mentoring, and suggestions. I asked the mentees if their mentor has contacted them and for general feedback and suggestions. I also asked if the program has helped them adjust to college, build time

management skills, familiarize them with career resources, and familiarize them with mental health resources. I received 6 mentor responses and 7 mentee responses. The analysis and results data are discussed below. Most of the goals were set to have the mentee achieve them as the mentorship program is focused on developing younger students.

Analysis of Goals/Results

Mentor Results

Goal: 30% Participation of identified mentee population

This goal was not achieved because we only had 31 students of the nearly 600 mentor qualified students. The “600” number was derived from half of the total students in the College of Aviation, assuming that at least half would be Juniors or Seniors and qualify as mentors. This comes out to participation of only 5.2% of eligible mentors.

Other Feedback

Of the 6 mentors that filled out the survey, all 6 said that their mentees participated and that they could handle the additional workload of being a mentor. Common issues with setting the mentor/mentee meetings are as follows:

- Geographical barriers to meet in person
- Only meeting via the internet
- Confusion on whether the meeting needed to be formal or informal

Feedback on Coaching Events

- Not much structure to them
- Very straight forward

Feedback on Opportunity Events

- Mentee was already heavily involved in opportunity events
- Straight forward and COA communicates resources well

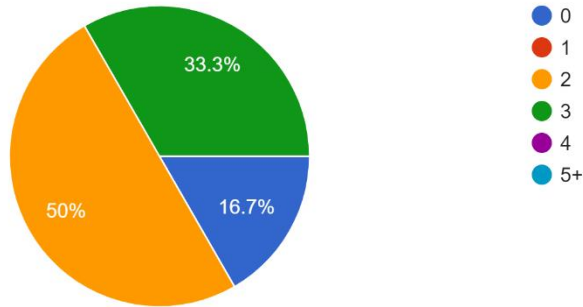
Feedback on Resiliency Events

- Not much structure made it difficult
- Could not attend one due to lack of planning

Finally, I asked the following question. The responses provided reinforcement that the program was beneficial. Results are in the graph below.

How many times did you see your mentoring have a positive benefit on the mentees?

6 responses



Mentee Results

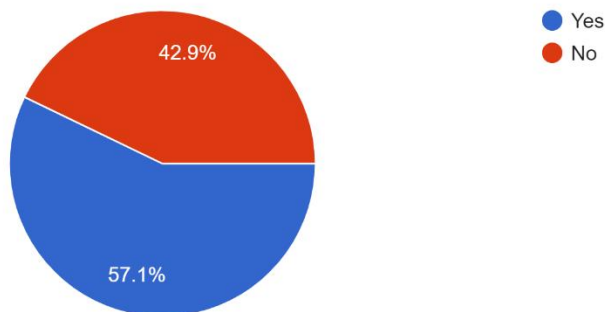
Of the 14 participating mentees, seven responded to the post program survey. The data below is based on those responses. Of those seven, there were two who said their mentor did not contact them. Data for how much the program helped them was based on a 5-point scale. 1 – Very Little, 2 – Somewhat, 3 – A bit, 4 – a lot, 5 – very much

Goal: Assist new college students with adjusting to college.

This goal was somewhat achieved based on the responses. Four of the Seven said they were more adjusted to college. Of these seven, three reported it helped them “a lot”. When asked about time management skills, however, four students said they did not improve, while three said they did improve.

Would you say you are more adjusted to the responsibilities of college after being in the program?

7 responses

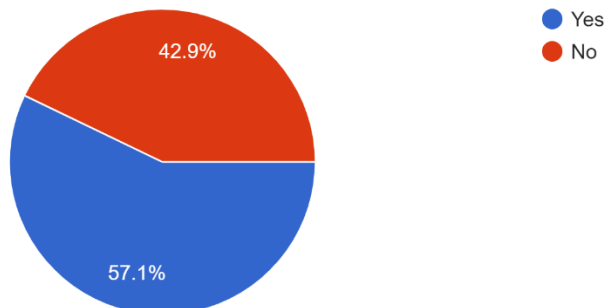


Goal: Increase new students’ knowledge about career paths and how WMU can aid them

When asked about resources to help students succeed after college and into their careers; four students answered the program did help and three answered that it did not. Of those four, two responded saying that the program helped with their knowledge of resources “a lot”.

Would you say you are more familiar with resources to help you succeed after having been in the program?

7 responses

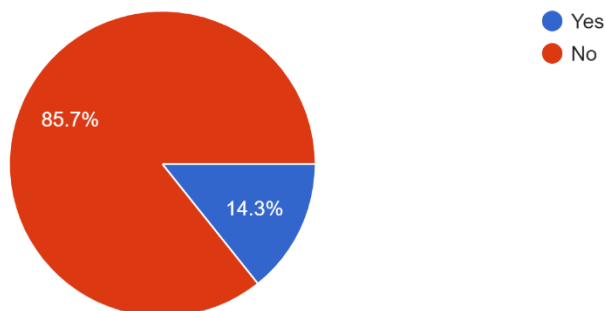


Goal: Give new students tools to deal with stress and build resilience and learn about mental health resources on campus

When asked about how the program helped with Mental Health resources the results were not as good as I had hoped. 6 of the 7 students said the program did not help, while 1 said it did help. The one student that it helped reported that the program helped them learn about mental health resources on campus “a lot”.

Would you say you are more familiar with mental health resources on campus that you can utilize after having been in the mentorship program?

7 responses



Goal: 30% of total identified mentee population

This goal was not achieved. Using the same logic as mentor participation I will assume about half the COA population are eligible to be mentees, which is about 600. Of these 600 only 14 responded to the email and signed up to be a mentee. This comes to 2.4% of eligible mentee participation.

Other Feedback

The mentees were asked how often their mentor updated them with events on campus in the weekly Aviation Newsletter that would be pertinent to the Core Values of the program (Coaching, Opportunity, Resiliency). Six of the seven students reported, “never updated”, and the seventh reported, “A little less that every week”.

Here are some answers when asked about improvements for future years and any other comments related to the program.

- Assign mentors sooner
- Plan scheduled meetings between mentor/mentee pairings as a program
- More guidance for the mentors with the structure of the program and how to mentor
- Kickoff meeting for all in the program for mentees and mentors to meet
- Program is needed in the COA, but with more structure or weekly goals

Future of the Program (based off results)

This section will discuss areas that need to be and can be improved to increase the effectiveness of the COR Mentorship program. As this was the first attempt at a program of this classification there have been many great suggestions and strides in knowledge gained for improvement. This is a innovative program made to shape the future and culture of the WMU College of Aviation incorporating many hot topics in aviation, including mental health and professionalism. Regardless of the participation and results, this is a necessary program to shape the next generations of Aviation personnel.

Areas of Improvement

The first area of improvement and one of the most important is participation overall. The numbers for this first attempt are exceedingly small in proportion to the entire college of aviation. The 5.2% of mentors and 2.4% of mentees was quite short of the mark. Along with participation is keeping the participation of the those already in the program. This idea is backed by statistics asking how often the mentor updated the mentee. This is an aspect that can and must be improved upon for successful implementation of a mentorship program.

The next area for improvement is explanations and implementation of the Core Values throughout the program. The core values are the lifeblood of why the program exists and there was confusion from mentors about how they fit into mentoring. There was confusion on what would qualify as a core value, as well as how to implement them into mentor/mentee meetings. The best implemented Core Values in order are Opportunity, Coaching, Resiliency. All three need to be implemented to the same standard that will make a positive impact on the mentees.

Another change that can be made is increasing the efficacy of the mentor’s ability to mentor. The tabling event I hosted, as a drop-in meeting and small training was not remarkably successful as only a handful of mentors attended. Other mentors stated in feedback, they were “unsure of how to go about setting meetings” and “there was a lack of structure in the program.” These feelings were mutual with the mentee side of the program as well.

The final aspect that should be improved is the structure of the program. There was a substantial feedback about confusion about the structure of mentor/mentee meetings and Core Value Events. This is a planning and design issue as much as it is an issue of getting the mentors the correct resources and training. As the program progresses there will be ideas and events that will stick and allow for greater structure and improvement of the program.

Facilitating the Improvement

There are major changes that will allow for improvement in the aforementioned areas and increase the efficacy of the program. The changes will improve the structure of the program and give better guidance to mentors and mentees on what to expect. The main changes are:

- Classroom visit advertising
- A kickoff event and total program meetings
- Mentor development meetings
- Mentee update meetings
- Mentor resource packet (physical and digital)
- More stringent mentor screening
- Allow for mentees to request a different mentors
- Create in person events to satisfy resiliency event requirement
- Adjusting the Core Values into principles and adopting the COA's values

Classroom Advertising

Classroom advertising would increase the numbers of participants in the program significantly. This would occur during syllabus week in all the pertinent aviation classes to entice both mentors and mentees to join the program. A power point would be made explaining the program and its benefits. A QR code would be displayed to allow for easy access to the form for getting into the program. The best classes to gather mentees in each major will be discussed first. These classes are:

1. AVS 1200 Intro to Aviation
2. AVS 1220 Intro to Airframes and Systems
3. AVS 2050 Aviation Safety
4. AVS 2960 Airframe Electrical Systems

The first three options are classes that all majors will take in their first year and likely the Fall semester. AVS 2050 is a class that can be taken first or second year, which will allow the advertising to catch any second-year students that would like to join the program. AVS 2690 has the same function, but for Tech Ops majors only because AVS 2050 is a third-year class in that major. It has been identified by a veteran Tech Ops professor that Tech Ops students will fit a mentor role by their third year due to the structure of the major.

The best classes to advertise the program for mentor candidates are:

1. AVS 3530 Professional Flight III Theory

2. AVS 3550 Professional Flight IV Theory
3. AVS 2070 Crew Resource Management
4. AVS 4280 International Aviation
5. AVS 4400 Air Cargo and Logistics Management
6. AVS 3140 Airline Operations
7. AVS 2950 Airframe Rigging
8. AVS 3930 Recip Inspection & Repair
9. AVS 3940 Engine Electrical & Instruments

The number of classes for mentor advertising is much longer because as each major specializes in their program there are fewer classes that all will be in together. Classes 1-3 are for Flight Science majors, 4-6 are for Management and Operations majors, and 7-9 are for Tech Ops majors. Each major has classes that will tap into third year students who will be effective mentor candidates with the ability to mentor for two years.

Kickoff Event and Subsequent Program Meetings

This change will fix the issue of program structure and keep all participating students involved. A kickoff meeting would be hosted where all mentees and mentors will be invited. This meeting will begin with an explanation of the structure of the program starting with everyone's role, then describe the core values, which will become the program pillars (explained in later paragraphs), explain the course of events for the semester, and assign mentors. There will be another meeting of this caliber at the end of the Fall semester and at the start and conclusion of the Spring semester. Total program meetings will allow for greater substance for the mentors and mentees.

The next kind of meetings that will aid in structure and traction for the program are mentor development meetings. These will be solely with the mentors to give them a chance to ask questions to the advisor about the program or any issues they have run into. It will also allow for us to discuss best practices for different situations. The advisor can use this time to set a standard for mentor/mentee meetings, different core value events, and give any training that is needed for the mentors. This training is imperative for the mentors to be effective in their roles as well as understand how to mentor in general. Topics on resiliency will be covered at each of these to increase the mentor's ability to incorporate that core value into the program. These topics will include but are not limited to learning about resiliency, how to talk about resiliency, and upcoming resiliency events.

The final program meeting that will allow for growth and improvement is a mentee update meeting with the advisor. This would allow for all mentees in the program to meet with the advisor and talk about what is working and what is not. The advisor can then take this feedback and present it at the mentor development meeting and at the semester meetings. A mentee update meeting is crucial to keep the mentees involved and having their opinions heard on what will support them the best. This is also a time for mentee to request a change of mentor, which will be processed and changed over at the end of each semester.

Mentor Resources and Screening

Having resources for the mentors is necessary so they can do their tasks efficiently. To aid the mentors a better organization of resources is a suitable place to start. Currently the resources are in files on Microsoft Teams and the mentors were made aware of them. A better approach to the distribution of resources would be to make a printed packet for each mentor and hand them out during the kickoff or mentor development meeting. After handing them out, the advisor would go over each document and explain its use for the mentors. The documents would also be distributed on the Microsoft teams for ease of access.

Screening and choice of mentors needs to be stricter for a successful program. There needs to be certain criteria that mentors meet to be considered for the position. I do not think interviews would be necessary, however, excellent questions would be:

- Why do you want to be a mentor?
- What do the core values mean to you?
- What experiences do you have that would translate to being a mentor?
- How would you integrate the core values into the program with your role as mentor?

Screening would allow for the best mentors to be chosen so that the program can be the most effective for the mentees. It will also allow for a better mentor to mentee ratio closer to that ideal 1:3-1:5. This ratio will give the mentees a group of their peers to communicate with and support one another.

Hosting Resiliency Events

The data shows that resiliency was the weakest of the three values in the program. To supplement this, it would be helpful to host resiliency events internally through the mentorship program itself. It would be created and hosted by those in the program. There are extensive resources online that will give substance to the content of the resiliency event. The program hosting events internally could give presentations on resiliency or bring in guest speakers. Any content provided at a presentation must be from a professional so that no disinformation is spread.

Core Value Changes and Adoption of the COA's Values

The final change that will give added structure and clarity would be renaming the "Core Values" (Coaching, Opportunity, Resiliency) to "Core Principles". Principles are something that serves as the foundation of a system, while values are beliefs that guide one's actions. The values of the program will adopt and mirror the College of Aviation's core values. These values are accountability, diversity, excellence, integrity, respect, and safety. Mentees would be taught about the Core Principles and how they can aid them in their careers after college. The COA's Core Values will be integrated into all aspects of the program. All students in the program will hold themselves and one another to these values. These values will allow for a continuous positive impact on the culture at the College of Aviation.

Blueprint for the Future

This section will briefly cover what the above changes will look like and act as a blueprint for the future. The future mission statement will read:

“The Western Michigan University Aviation Mentorship Program has been established to aid students in becoming successful students and professionals. This program is based on 3 core principles: Coaching, Opportunity, Resiliency. The program also embodies the core values upheld in the College of Aviation. After having gone through this program students will have improved major specific knowledge, general information of aviation opportunities, and the skills to succeed throughout college”.

The COA’s core values are Accountability, Diversity, Excellence, Integrity, Respect, and Safety. The program’s goals will stay the same until they are fulfilled, at which time further goals will be pursued. The schedule of the program will also be modified. Below is this new schedule.

- July/August: Advertise mentorship program at Aviation student orientation to parents and students
- Aug. 30th-Sept. 5th: Advertise mentorship program for mentors and mentees in the specified classes, via email, and on posters
- Sept. 6th-10th: Pick mentors and add them to Microsoft Teams pairings
- Sept. 11th-15th: Host Mentor Development meeting and create mentor/mentee pairings =
- Sept. 18th-22nd: Finish any mentor/mentee pairings and Host Kickoff Event
- Oct.: Host mentor development and mentee update meeting and possible resiliency event
- Nov.: Host mentor development and mentee update meeting and possible resiliency event
- Dec. 1st-8th: Host program wide semester ending event

- Jan. 8th-14th: Host Semester kickoff meetings and advertise via emails and posters
- Jan. 14th-24th: Host mentor development meeting and mentee update meeting
- Feb.: Host mentor development and mentee update meeting and possible resiliency event
- Mar.: Host mentor development and mentee update meeting and possible resiliency event
- Apr.: Host mentor development and mentee update meeting and possible resiliency event
- Apr. 7th-14th: Host year end meeting

Conclusion

A mentorship program at the College of Aviation is necessary to continuously produce the best aviation personnel and equip them for their careers. Western Michigan University’s College of Aviation is one of the best aviation training schools in the nation and on the leading edge of the aviation industry. Considering the premier and rigorous training that WMU provides to its students, the industry’s focus on mental health, and the vast opportunities after college a mentoring program is necessary to equip students with the knowledge and skills to succeed. Implementing the changes explained above and continuing to expand the Aviation Mentorship

Program will pay dividends for years to come and add value to Western Michigan University and its students.